NATIONAL WEATHER SERVICE
WESTERN REGION
SALT LAKE CITY, UTAH

JULY 15, 2003

REGIONAL DIRECTOR

Fire Activity Continues to Increase in the West: Hot and very dry conditions continue throughout the West and have caused an increase in the fire suppression activities across the region. The sustained warmth has resulted in daily weather records surpassing previous marks, continuation of the drought in many areas, and a heavy workload for all the forecast offices.

Thank you for your continued good work and fulfilling our mission of protecting lives and property.

DEPUTY REGIONAL DIRECTOR

(l to r) IMET Chuck Redman and Scott Birch explain the NWS Fire Weather Program to Sandy Kester. Looking on is Craig Schmidt, Chris Young, and WRH MSD Admin Assistant Laura Smith.

Congressional Activity: NWS Western Region staff briefed Sandy Kester, Northern Utah Director for Senator Orrin Hatch on the role of the Incident Meteorologist at a wildfire. Ms. Kester visited the Farmington Fire Incident Command Center, near Salt Lake City, on July 15. Scott Birch, WR Fire Weather Program Manager, and IMET Chuck Redman explained the roles of the various Federal, state, and local agencies who work collaboratively to support the fire fighters. Ms. Kester was shown the equipment used by the IMETs when they are deployed to a fire and learned how the NWS works with the land management agencies for firefighter safety. Craig Schmidt, NWR Program Manager, explained the weather radio coverage in the state and the national goal of 95 percent coverage. NWS SLC Forecaster Chris Young explained some of the programs at the forecast office. The visit was coordinated by WR PAO, Marilu Trainor.

WFO Elko Participates in Lamoille Country Fair: On June 29, staff from WFO Elko, Nevada, participated in the annual Lamoille Country Fair. Nearly 4,000 visitors attended this event at the base of the Ruby Mountains in the community of Lamoille. Many visitors stopped by the NWS booth to gather weather information and learn about the role of the NWS in the local community.

National Weather Service Supports Homeland Security: On July 10 and 11, Warning Coordination Meteorologists Rick Dittmann (WFO Great Falls, Montana) and Bill Sammler (WFO Wakefield, Virginia) presented background and safety related information on severe thunderstorms, tornadoes, flooding, wildfires, and hurricanes to personnel from the DOD United States Northern Command (NORCOM) at Norfolk Naval Air Station, VA. This training was organized through Standing Joint Force Headquarters as part of DOD/Department of Homeland Security operations. The presentations focused on the natural hazards for which the NORCOM Joint Operations Center staff will provide support during presidentially declared disasters requiring military activation. Rick and Bill also shared critical web site information, advantages of manipulating the NWS digital database to customize products, and the importance of interagency relationships before, during, and after disaster response.

(l to r) WCM Peter Felsch and forecasters Tom Wright and Scott Dickson participate in the Missoula Airfest.

Missoula Airfest: WCM Peter Felsch and Forecasters Tom Wright and Scott Dickson from NWS Forecast Office in Missoula, Montana, hosted a very popular exhibit during the July 12 Missoula Airfest. In addition to handing out NWS brochures, they hooked up the dish to have access to FX-NET to display real time weather data on a laptop. Since this was a hot day, most of the people visiting the booth were interested in the current temperature, and/or how hot it was going to get during the show. It ended up getting to 99 degrees. Over 15,000 people attended the Airfest.

METEOROLOGICAL SERVICES DIVISION

STATEMENT OF THE WEEK: This week's statement of the week is a Severe Weather Statement by SOO Erik Pytlak of WFO Tucson. The SVS represents a well written severe weather statement which contained specific what, when, and where information. The event produced multiple damaging wind reports across eastern Pima county and northern Santa Cruz county throughout the evening. The first warning associated with this statement had a lead time of 14 minutes. Also, toward the end of the statement, Erik mentions "this dangerous wall of wind and dust affects the interstate." Once the severe thunderstorm diminished a dust storm warning was issued. It verified with the city of Marana (located along the interstate) reporting visibility near zero in blowing dust. Good Job Erik!

WWUS55 KTWC 140331
SVSTWC
AZC019-021-023-140415-

SEVERE WEATHER STATEMENT
NATIONAL WEATHER SERVICE TUCSON AZ

830 PM MST SUN JUL 13 2003

...SEVERE THUNDERSTORM WARNING FOR EASTERN PIMA AND CENTRAL SANTA CRUZ COUNTIES EXPIRED...
...SEVERE THUNDERSTORM WARNING FOR NORTH CENTRAL PIMA AND SOUTH CENTRAL PINAL COUNTIES REMAINS IN EFFECT UNTIL 900 PM...
...DUST STORM WARNING FOR THE TOHONO OODHAM NATION UNTIL 915 PM...

AT 830 PM MST...A DECAYING CLUSTER OF SHOWERS AND THUNDERSTORMS WAS COVERING A LARGE PORTION OF THE TUCSON METRO AREA. HOWEVER...THE DAMAGING WIND FROM THIS STORM CLUSTER CONTINUES TO MOVE WEST AND NORTH INTO CENTRAL PIMA AND SOUTH CENTRAL PINAL COUNTIES AT ABOUT 30 MPH.

THIS IS A PARTICULARLY DANGEROUS SITUATION. DAMAGING WINDS OF 60 TO 80 MPH WERE REPORTED BETWEEN 750 PM AND 800 PM IN THE TUCSON AND GREEN VALLEY AREAS. VISIBILITIES FELL FOR A TIME TO NEAR ZERO AT THE NATIONAL WEATHER SERVICE OFFICE NEAR DOWNTOWN TUCSON. REMAIN IN A STURDY BUILDING UNTIL THIS STORM HAS PASSED. DO NOT TOUCH DOWNED POWER LINES. MOTORISTS ON INTERSTATE 10 BETWEEN TUCSON AND PICACHO PEAK ARE URGED TO PULL OFF THE ROAD AS THIS DANGEROUS WALL OF WIND AND DUST AFFECTS THE INTERSTATE.

IN THE TUCSON METRO AREA...WIND GUSTS UP TO 45 MPH ALONG WITH BRIEF HEAVY RAIN CAN BE EXPECTED THROUGH 930 PM.

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PYTLAK

WFO Billings Senior Forecaster Chuck Bikle (left) and Yellowstone Radio Club member Dave Beadle (right) make a HF contact.

WFO Billings Shares HAM Communications Expertise with Other Agencies: On the weekend of June 28-29, WFO Billings hosted Amateur Radio Field Day. This was the first year of new FCC rules allowing EOCs and other emergency agencies to participate in the yearly exercise as a class 1F station. The purpose of the field day was to exercise emergency communications through ham radio and to have a good time. The NWS in Billings has been working closely with local hams to improve ham radio communications, including setting up a new 2 meter rig, a club call sign (W7NWS) and recently a HF (High Frequency) rig. During the open house phase, WFO BYZ demonstrated the "NWS Billings" model to other agencies, including the Red Cross, State and County DES, and other local businesses such as Exxon

Mobile, showing how valuable ham communications can be in an emergency situation. Overall, WFO BYZ had about 30 visitors in the open house phase with 577 contacts on the HF radio over a 24 hour period. The event was organized by WCM Jim Scarlett, and Senior Forecasters Dan Borsum and Chuck Bikle along with the Yellowstone Radio Club.

SCIENTIFIC SERVICES DIVISION

COMET Hydrology RFP: The COMET Outreach Program, at the request of the National Weather Service's Office of Hydrologic Development/Hydrology Laboratory (OHD/HL), announces a special RFP for research related to inland flooding from tropical storms.

The COMET Program and NWS/OHD/HL are soliciting one-year proposals. We anticipate funding one project at a level not to exceed $41,000. Proposals are due no later than September 29, 2003. More information and proposal requirements can be found online at http://www.comet.ucar.edu/outreach/inland.htm.

New Additions to the Western Region Library: The following DVD/CD-ROMs have been added to the Western Region library:

1529 21 APRIL 2002 SOUTHERN ILLINOIS SUPERCELLS (2003): During the afternoon of April 21, 2002, several supercells developed over southern Illinois and spread into southwest Indiana. Radar data showed that the southernmost storm had the best structure and definition and was associated with the most severe weather reports. However, the northern storm interacted with a quasi-stationary boundary and produced a deadly tornado. An important and challenging part of this event is that the supercell storm was approximately 90 - 100 nm away from the Paducah, KY WSR - 88D. NOTE: This dataset is large, requiring approximately 7.8 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1530 13 - 15 MARCH 2002 NARROW FRONTAL SNOW BAND (2003): This case exemplifies forecasting problems that arise with a narrow frontal band of heavy snow. Typical of these events, a strong gradient in snowfall was present along the southern edge of precipitation. Issuance of winter storm warnings with large lead times were difficult as position errors of 20 - 40 miles resulted in snowfall differences in excess of 6 inches. This event was forced by the initial interaction of mid-level front and upper-level jet resulting in symmetric instability. Forcing was later intensified through phasing of a potential vorticity anomaly embedded within the southern stream of the jet. NOTE: This dataset is large, requiring approximately 8.6 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1531 10 APRIL 2001 GID SEVERE WEATHER OUTBREAK (2003): During the evening of April 10, 2001, severe weather associated with a rapidly developing low-pressure system moved through the County Warning Area of WFO Hastings, Nebraska. A squall line formed in southwest Kansas and moved through the CWA. Within the

squall line were embedded supercells that transitioned into bow echoes. This case addresses the challenges of distinguishing tornadic activity in a squall line, the transition of an embedded supercell into a bow echo, and the monitoring of features associated with rapid cyclogenesis. NOTE: This dataset is large, requiring approximately 7.2 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1532 08 APRIL 1998 BMX SEVERE WEATHER OUTBREAK (2003): On April 8, 1998, an unstable and highly sheared environment over the southeastern U.S. set the stage for supercell development over Mississippi, Alabama, and Georgia. These storms produced wind, hail, and tornadoes, and resulted in 36 deaths and over $300 million in property damage. The mesoscale aspects of this case include a well-defined boundary detectable both on radar reflectivity and visible satellite imagery. For example, when a tornadic supercell merged with this boundary, the tornado increased in intensity from F0 to F3. NOTE: This dataset is large, requiring approximately 4.9 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1533 11 AUGUST 1999 SALT LAKE CITY TORNADO (2003): One of the most devastating weather events in Utah's history occurred on August 11, 1999, as a tornado moved through downtown Salt Lake City between 18:45 and 18:55 UTC. The tornado damage was rated as F2 on the Fujita scale, and was responsible for 1 death (the first recorded tornado death in the state's history) and dozens of injuries. Hail up to 1.5 inches in diameter was also reported form this storm. NOTE: This dataset is large, requiring approximately 6.7 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1534 29 JUNE 1998 DMX DERECHO (2003): On June 29, 1998, a derecho evolved from a complex of storms, including some supercells, over Iowa. Damaging wind was observed along with other classic bow echo characteristics close to the KDMX radar in Des Moines, IA. Some of the more intense areas of damaging wind occurred with a supercell-like structure within the line that passed directly over the radar, ultimately resulting in loss of the radar during the event. Many reports of winds greater than 60 knots were noted, as well as several tornadoes, hail, heavy rain, and small stream flooding in association with the system. NOTE: This dataset is large, requiring approximately 3.3 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

1535 31 MAY 1998 ALY SEVERE WEATHER OUTBREAK (2003): Beginning May 31, 1998, lines of severe thunderstorms formed and moved rapidly east across New York and Western New England. Several of these storms became tornadic over Saratoga, Albany, and Washington counties in New York, and Bennington county in Vermont. Straight line wind damage occurred in most counties of NWSFO Albany's County Warning Area. Cloud to ground lightning rates over the region reached 15,000 strokes per hour. NOTE: This dataset is large, requiring approximately 4.5 GB of disk space. The companion study guide may be obtained from http://strc.comet.ucar.edu/wes.

Please contact Chelsea Leader at Western Region Headquarters if you would like to check any of these out.

SYSTEMS OPERATIONS DIVISION

NWR: A site survey was completed for the Florence, OR, USDA NWR along with site data checks at all Portland, OR, NWRs. Portland will hopefully be replacing 2 outdated NWR transmitters in the months to come.

STAR Training: Stop Taking Avoidable Risks (STAR) Train the Trainer. On July 14, Joe Duran, Regional Safety Manager at WASC, trained ten people as trainers for the 4-hour STAR Training course. The people trained were Rich Anderson, Kevin Bolton, Bob Diaz, Lee Jenson, Bob Kinsinger, Joe Lachacz, Randy Miller, Son Nguyen, Tom Page, and Jeff Walker. During the remainder of calendar year 2003, these 10 people will conduct STAR Training courses in Western Region. Whenever any one of the ten individuals is on the road, they will coordinate with the local offices and set up these training sessions. Further info to follow.

IT Security Review: The NWS Office of the CIO will conduct IT Security Reviews at Western Region Headquarters, WFO Salt Lake City, and the CBRFC the week of July 21.

RRS Deployment Planning Meeting Follow Up: Kevin Bolton, Regional Maintenance Specialist, attended the two day planning meeting in Sterling, Virginia, this past week. The meeting was lead by Tom Roberts. Some of the topics included training, documentation, peripheral equipment, facilities, operations, data archiving, deployment, and support. The site currently scheduled for the OAT is the Salt Lake City office, with the alternate OAT site being Spokane. The current schedule for 2004 is: Salt Lake in February, Spokane and Boise in June, and Flagstaff in July. Any questions, or comments, should be forwarded to Kevin Bolton.